

REMARKS

Claims 1-4, 6-8, 11-22 and 24-28 are pending in the present application and have been rejected. Claims 1 and 24 are amended herein and claim 3 is cancelled.

Rejections Pursuant to 35 U.S.C. §112

In the Office Action, claims 1-4, 6-8 and 11-22 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite. With respect to claim 1, the structural relationship between the claimed channel and the claimed transport and support layers was deemed unclear. In addition, the limitations recited in claim 3 were said to contradict the limitations recited in claim 1.

Claim 3 is cancelled herein and its subject matter has been incorporated into claim 1, which now recites "a plurality of layers of flat materials defining two or more sample channels . . . the plurality of layers of flat material comprise a plurality of transport layers arranged in a stack-like manner between support layers, the transport layers each comprise two sections having opposing edges which comprise side walls of the sample channels . . ." Support for the instant amendment can be found in the original claims. No new matter has been added. In light of the present amendment, applicants respectfully submit that the claims are in compliance with the statute and request that the rejection be withdrawn.

Rejections Pursuant to 35 U.S.C. §103

Also in the Office Action, claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Chow (U.S. Pat. No. 6,167,910) in view of Arnold et al. (U.S. Pat. No. 6,210,986 B1). Applicants note that the Arnold reference was not specifically listed on the Notice of References Cited (PTO-892) which accompanied the Office Action. It is asserted in support of the instant rejection that although the device disclosed by Chow differs from the claimed invention in that the sidewalls of the channels are not defined by a gap between two pieces of material, but rather formed by etching groves into

individual substrates, Arnold et al. disclose a microfluidic device comprising multi-layered channels (see Fig. 6C), the channels having sidewalls defined by a gap between two pieces of spacers 230. It is further asserted that Arnold et al. disclose that etching produces channels that are wider at the top than at the bottom whereas channels formed by spacers exhibit a more uniform width and that in light of this it would have been obvious to one of ordinary skill in the art to form the channels disclosed by Chow using spacers rather than etching. Claims 25 and 26 were also rejected under §103(a) as being unpatentable over Chow in view of Arnold et al. as applied to claim 24, and further in view of Ekström et al. (U.S. Pat. No. 5,376,252) and Yager et al. (U.S. Pat. No. 6,482,306 B1), respectively. Claims 27 and 28 were further rejected under §103(a) as being unpatentable over Chow in view of Arnold et al. and Yager et al. as applied to claim 26, and further in view of Oloman et al. (U.S. Pat. No. 4,118,305).

Also in the Office Action, claims 1-4, 6-8 and 11-22 were said to be allowable if rewritten or amended to overcome the rejections under §112, second paragraph, as set out therein. The Examiner noted in a statement of reasons for the indication of allowable subject matter that the staggered arrangement disclosed by Chow provides an unobstructed window to the optical detection area of each channel and that based on the disclosure, there is no motivation or suggestion to stagger the layers such that the electrodes are exposed despite the fact that the channels disclosed by Chow comprise electrodes. Applicants gratefully acknowledge this statement.

To establish a *prima facie* case of obviousness, *inter alia*, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Claim 24 is also amended herein and recites a device for analyzing a biological liquid sample comprising a plurality of liquid sample channels . . . defined by plurality of alternating support layers and transport layers . . . wherein said support layers are displaced relative to one another in a step-like manner, such that the support layers comprise a connecting section extending beyond an adjacent transport layer. No new matter has been added.

As noted in the Examiner's indication of allowable subject matter, "the staggered arrangement disclosed by Chow provides an unobstructed window to the optical detection area of each channel . . . there is no motivation or suggestion to stagger the layers such that the electrodes are exposed despite the fact that the channels disclosed by Chow comprise electrodes." Chow, consequently, cannot be said to teach that the support layers comprise a connecting section extending beyond an adjacent transport layer, and therefore in light of the instant amendment cannot be relied upon in support of the rejection of claim 24. Claims 25-28 contain all of the limitations of claim 24 and neither Arnold et al., Ekström et al., Yager et al., nor Oloman et al. fulfill the deficiencies of Chow. Applicants respectfully submit that in view of the preset amendment a *prima facie* case of obviousness hasn't been established and request that the rejections be withdrawn.

CONCLUSION

Applicants have filed a complete response to the outstanding Office Action and respectfully submit that, in view of the above amendments and remarks, the application is in condition for allowance. The Examiner is encouraged to contact the undersigned to resolve efficiently any formal matters or to discuss any aspects of the application or of this response. Otherwise, early notification of allowable subject matter is respectfully solicited.

Respectfully submitted,

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